Ban Fracking Waste in CT, Support SB 237
Testimony to CT General Assembly Environment Committee
Jen Siskind, Local Coordinator, Food& Water Watch
Glastonbury, CT
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Senator Meyer, Representative Gentile and members of the committee, I am here today to ask you to support Senate Bill 237 and to protect CT from the damaging impacts that toxic, radioactive fracking waste will have on our state and the health of its residents.

Chemicals found in fracking waste are extremely harmful to human health and to the environment. Many are known carcinogens, also suspected carcinogens, known endocrine distrupters and neurotoxins. Toxins in fracking waste also cause kidney, liver, soft tissue and respiratory damage and birth defects.

There are many chemicals used that the industry refuses to disclose. Health is put further at risk as the synergistic effects of combining multiple chemicals are not fully known, nor can it be evaluated while contents of fracking waste are kept secret. We do know that this secret, toxic cocktail has wiped out ecosystems in ponds where spills have occurred.

In addition to man-made chemicals, naturally occurring contaminants and heavy metals that were safely contained in the Earth's crust for millions of years mingle with fracking fluids and are brought to the surface. Toxic wastewater can contain numerous radioactive elements including barium, radon and radium. The safe level of radium-226 in drinking water is 5 pCi/L. Samples of flowback waste and production brine taken by NY State & the US Geological Survey varied widely, but repeatedly tested with radium 226 levels exceeding 10,000 pCi/L.

The unknown nature of fracking wastewater makes treatment, disposal and transportation very dangerous. Tanker trucks are the primary method of transporting fracking wastewater for treatment or disposal. I visit family members several times a year in Pennsylvania and can tell you first hand that the roads and highways there are now overwhelmed with trucks. There are times when driving that there are more industrial-sized trucks surrounding you than passenger cars. The exhaust and ozone problems are extreme, as is the noise from braking systems. This industry operates 24/7, so trucks are clogging the roads day and night.

I've shared with you today some photos of waste water trucks on location at a treatment facility in my family's town. Please examine them carefully and note the puddles, streaks and dark staining near the hose lines and in the vicinity where these trucks are unloading liquid waste. Spillage appears to be an issue under normal operations, potentially putting workers at risk.

Accidents from trucks carrying toxic, radioactive fracking waste would also cause serious challenges for first-responders and Haz-Mat teams called in to clean a spill because they would not know what chemicals were initially contained in the toxic mix or levels of radioactivity. Even if material safety data sheets are available, studies have shown these sheets to be deficient and inadequate in providing complete information. Sampling of truck contents could not adequately assure each load contains safe levels of radiation. Only monitoring every load would do this. DEEP does not have the resources and a third party system would be a weak link, and also require monitoring.

More broadly, the local air quality impact over time would be measureable hundreds of feet down the plume from a spill. Over hours or days, individuals living nearby may breathe in contaminants from the plume. It's not possible to attribute the cause of a given health outcome to such an exposure, but there is no doubt that the exposure history could contribute to the molecular and cellular conditions of diverse diseases.

In a tanker accident, these chemicals could spill into storm sewers or run directly into waterways or agricultural areas, further jeopardizing public health and the environment. Accidents and spills are an inevitable consequence of managing a waste stream as vast as that produced by hydrofracking. In discussing exposure to radioactivity, Radisav R. Vidic, a professor of civil and environmental engineering at the University of Pittsburgh plainly states, "The potential pathway is an accident, a spill or a leak…That's something that happens…there is nothing you can do about it."

When a fracking wastewater truck makes it to a wastewater treatment facility, that facility will not know what they are dealing with from one batch of fracking wastewater to the next. This will make it virtually impossible for facilities to know if they are adequately treating wastewater before discharging it.

Adequate treatment has not been occurring and that facilities are not equipped to fully mitigate bromides and radioactivity. Studies downstream of treatment plants in both the Allegany River and Blacklick Creek show significant contamination. Levels of radioactivity found in Blacklick Creek are extremely high, qualifying as a radioactive waste site. Quotes from Duke University researchers who completed the study, Drs. Vengosh and Jackson, include, "There's the danger of bioaccumulation of the radium. It will eventually end up in fish and that is a biological danger." "Years of disposal of…wastewater with high radioactivity has created potential environmental risks for thousands of years to come." "Once you have a release of fracking fluid into the environment, you end up with a radioactive legacy." When asked if local citizens should be concerned, Dr. Jackson replied, "If I lived there, I would be concerned about wastewater and wastewater products. The public should be concerned…anything they can do to reduce the amount of public wastewater exposure, they should be doing."

Here in CT, we can reduce our exposure by prohibiting the disposal and storage of toxic, radioactive fracking waste. The issues of shale gas and the by-products of drilling are separate & distinct, and there is no requirement that customers of shale gas accept waste products. Please pass SB 237 out of this committee, and as individual members please co-sponsor this bill and work within your caucus to assure its successful passage this session. Thank you.

(Photos next 5 pages)

What appears to be spillage at waste treatment facility with dripping near hoses, staining and run-off exiting outdoors of loading dock at bottom right of photo. 1/5

Puddling under truck at waste treatment facility. Photo labeled “unloading operation” and depicts water truck. Though fully screened of solids, water remains contaminated and is not potable. 2/5

Filters are currently being studied by PADEP to evaluate radioactive contamination. CT would be adding these to our hazardous waste landfills should facilities be built in our state. 3/5

Rush hour. 4/5

Don’t Waste CT 5/5